

IN THE CLAIMS:

1. (Canceled)

2. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

    a first thin film transistor;

    a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

    an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises an active layer in which two or more channel regions connected in series are formed.

3. (New) A portable telephone according to claim 2, wherein each of the first and second thin film transistors has at least one lightly doped impurity region between a channel region and a source region or impurity regions where the lightly doped impurity region of the first thin film transistor does not overlap a gate electrode of the first thin film transistor and the lightly doped impurity region of the second thin film transistor overlaps a gate electrode of the second thin film transistor at least partly.

4. (New) A portable telephone according to claim 2, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

5. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

    a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises an active layer in which two or more channel regions connected in series are formed, and

wherein a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor.

6. (New) A portable telephone according to claim 5, wherein each of the switching element and current control element has at least one lightly doped impurity region between a channel region and a source region or impurity regions where the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element and the lightly doped impurity region of the current control element overlaps a gate electrode of the current control element at least partly.

7. (New) A portable telephone according to claim 5, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

8. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein at least the first thin film transistor comprises an active layer in which two or more channel regions connected in series are formed, and

wherein an equation of  $W_2/L_2 \geq 5 \times W_1/L_1$  is established where a channel length of the second thin film transistor is  $L_2$ , a channel width of the second thin film transistor is  $W_2$ , a channel length of the first thin film transistor is  $L_1$  and a channel width of the first thin film transistor is  $W_1$ .

9. (New) A portable telephone according to claim 8, wherein each of the switching element and the current control element has at least one lightly doped impurity region between a channel region and a source region or impurity regions where the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element and the lightly doped impurity region of the current control element overlaps a gate electrode of the current control element at least partly.

10. (New) A portable telephone according to claim 8, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

11. (New) A portable telephone according to claim 8, wherein the channel length of the second thin film transistor ( $L_2$ ) is 0.1 to 50 mm, the channel width of the second thin film transistor ( $W_2$ ) is 0.5 to 30 mm, the channel length of the first thin film transistor ( $L_1$ ) is 0.2 to 18 mm and the channel width of the first thin film transistor ( $W_1$ ) is 0.1 to 5 mm.

12. (New) A portable telephone comprising:  
a substrate; and  
a plurality of pixels over the substrate, each of the plurality of pixels comprising:  
a first thin film transistor;  
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and  
an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and

wherein the impurity region has the same impurity concentration as a source or drain regions of the first thin film transistor.

13. (New) A portable telephone according to claim 12, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

14. (New) A portable telephone according to claim 12, wherein an equation of  $W2/L2 \geq 5 \times W1/L1$  is established where a channel length of the second thin film transistor is L2, a channel width of the second thin film transistor is W2, a channel length of the first thin film transistor is L1 and a channel width of the first thin film transistor is W1.

15. (New) A portable telephone according to claim 12, wherein the channel length of the second thin film transistor (L2) is 0.1 to 50 mm, the channel width of the second thin film transistor (W2) is 0.5 to 30 mm, the channel length of the first thin film transistor (L1) is 0.2 to 18 mm and the channel width of the first thin film transistor (W1) is 0.1 to 5 mm.

16. (New) A portable telephone according to claim 17, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

17. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions,

wherein a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor, and

wherein the impurity region has the same impurity concentration as a source or drain regions of the first thin film transistor.

18. (New) A portable telephone according to claim 17, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

19. (New) A portable telephone according to claim 17, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

20. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises an active layer in which at least two channel regions connected in series are formed with an impurity region interposed therebetween, and

wherein each of the first and second thin film transistors has at least one lightly doped impurity region between a channel region and a source region or impurity regions where the lightly doped impurity region of the first thin film transistor does not overlap a gate electrode of the first thin film transistor and the lightly doped impurity region of the second thin film transistor overlaps a gate electrode of the second thin film transistor at least partly.

21. (New) A portable telephone according to 20, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

22. (New) A portable telephone according to claim 20, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

23. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a switching element comprising an active layer and at least first and second gate electrodes adjacent to the active layer with a gate insulating film interposed therebetween;

a current control element comprising a gate electrode electrically connected to the switching element; and

an electroluminescence element electrically connected to the current control element.

24. (New) A portable telephone according to claim 23, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

25. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

    a switching element comprising an active layer and at least first and second gate electrodes adjacent to the active layer with a gate insulating film interposed therebetween;

    a current control element comprising a gate electrode electrically connected to the switching element; and

    an electroluminescence element electrically connected to the current control element,

wherein a channel width of the current control element is greater than a channel width of the switching element.

26. (New) A portable telephone according to claim 25, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

27. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

    a switching element comprising an active layer and at least first and second gate electrodes adjacent to an active layer with a gate insulating film interposed therebetween;

    a current control element comprising a gate electrode electrically connected to the switching element; and

an electroluminescence element electrically connected to the current control element,

wherein each of the switching element and the current control element has at least one lightly doped impurity region between a channel region and a source region or impurity regions where the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element and the lightly doped impurity region of the current control element overlaps a gate electrode of the current control element at least partly.

28. (New) A portable telephone according to claim 27, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

29. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a switching element comprising at least two thin film transistors;

a current control element comprising a gate electrode electrically connected to the switching element; and

an electroluminescence element electrically connected to the current control element.

30. (New) A portable telephone according to claim 29, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

31. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a switching element comprising at least two thin film transistors;

a current control element comprising a gate electrode electrically connected to the switching element; and

an electroluminescence element electrically connected to the current control element,

wherein a channel width of the current control element is greater than a channel width of the switching element.

32. (New) A portable telephone according to claim 31, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

33. (New) A portable telephone comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

    a switching element comprising at least two thin film transistors;

    a current control element comprising a gate electrode electrically connected to the switching element; and

    an electroluminescence element electrically connected to the current control element,

wherein each of the switching element and the current control element has at least one lightly doped impurity region between a channel region and a source region or impurity regions where the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element and the lightly doped impurity region of the current control element overlaps a gate electrode of the current control element at least partly.

34. (New) A portable telephone according to claim 33, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.